Consumer Product Safety Commission

Figures 11, 12 and 13 to Part 1203—Hemispherical Anvil and Curbstone Anvil

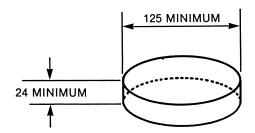


Figure 11. Flat Anvil

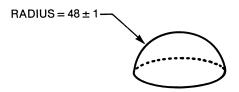
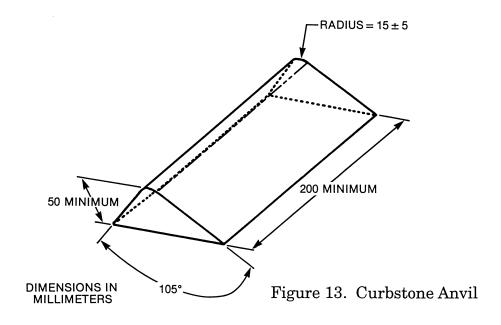


Figure 12. Hemispherical Anvil



Pt. 1204

PART 1204—SAFETY STANDARD FOR OMNIDIRECTIONAL CITIZENS BAND BASE STATION ANTENNAS

Subpart A—The Standard

Sec.

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FIGURES 1 AND 2 TO PART 1204—SUGGESTED INSTRUMENTATION FOR CURRENT MONITORING DEVICE AND HIGH VOLTAGE FACILITY

FIGURES 3 AND 4 TO PART 1204—HIGH VOLTAGE
TEST FACILITY AND ANTENNA SYSTEM
TEST SETUP

AUTHORITY: Secs. 2, 3, 5, 7, 9, 14, 16, 19, 25, Pub. L. 92-573, 86 Stat. 1207, 1208, 1211-17, 1220, as amended Pub. L. 95-319, sec. 1, 92 Stat. 386, Pub. L. 94-284, 90 Stat. 503; 15 U.S.C. 2051, 2052, 2054, 2056, 2058, 2063, 2065, 2068, 2074

SOURCE: 47 FR 36201, Aug. 19, 1982, unless otherwise noted.

Subpart A—The Standard

§ 1204.1 Scope of the standard.

(a) General. This subpart A of part 1204 is a consumer product safety standard which prescribes safety re-Citizens quirements for omnidirectional base station antennas. The standard is intended to reduce the risk of electrocution or serious injuries occurring if the antenna contacts an electric power line while the antenna is being put up or taken down. One way that this can be accomplished is to insulate the antenna so that if it contacts the power line, there is less of a likelihood that a harmful electric current will be transmitted from the power line through the antenna and mast and ultimately through a person holding the antenna mast. Another possible way to provide this protection is to incorporate an insulating barrier

between the antenna and the mast or other supporting structure, so that a harmful electric current will not pass from the antenna to a person in contact with the mast. (If this alternative were chosen, the feed cable from the antenna would have to be insulated or otherwise protected so that it would not provide an electrical path to the mast or a person touching the cable.)

- (b) Description of the standard—(1) Performance tests. The standard describes two performance tests to determine if the means chosen by the manufacturer to protect against the shock hazard will provide adequate protection.
- (i) First, there is an Insulating Material Effectiveness Test (§1204.4(d) of this subpart) in which a high voltage electrode or test rod is brought into contact with the antenna at any point within the protection zone established by §1204.2(k) of this subpart to ensure that the insulation can withstand the voltage for 5 minutes without transmitting more than 5 milliamperes (mA) root-mean-square (rms) of electric current.
- (ii) The other test is an Antenna-Mast System Test (§1204.4(e) of this subpart) which is intended to determine whether the means provided to protect against electrocution will withstand the stress imposed when an antenna-mast system falls onto a power line. This test consists of mounting the antenna to be tested on a specified mast and allowing the assembled antenna and mast to fall onto a power line of 14,500 volts rms phase to ground.
- (2) Recommended materials. (i) Since a substantial portion of the accidents addressed by this standard occur when the antenna is being taken down after it has been installed in an outdoor environment for a number of years, the materials selected to provide protection from shock should be weather resistant.
- (ii) Although other materials may also be suitable, materials meeting the following criteria should be reasonably weather resistant:
- (A) Material composition includes an ultraviolet stabilizer or screen.
- (B) Heat resistance of 212 $^{\circ}$ F (100 $^{\circ}$ C) without loss of elasticity (ANSI/ASTM D 746–79).